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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/750,520   | 12/31/2003  | Guido Canzona        | 024.0043 (03-0476)  | 9248             |
| 29906  | 7590        | 04/29/2005           | EXAMINER            |                  |
| INGRASSIA FISHER & LORENZ, P.C.<br>7150 E. CAMELBACK, STE. 325<br>SCOTTSDALE, AZ 85251 |             |                      | JENKINS, DANIEL J   |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1742                |                  |
| DATE MAILED: 04/29/2005  |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/750,520

Applicant(s)

CANZONA, GUIDO

Examiner

Daniel J. Jenkins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. The Examiner has carefully considered Applicant's Response of 1/31/05. Applicant has amended the claims to include a limitation that the first pressing is performed in the pressure transmitting medium, overcoming the prior rejection. The Examiner makes a new rejection which is accordingly made final.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 13-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meeks, III et al. 6,630,008 (Meeks '008) in view of Pyzik et al. Meeks '008 discloses the invention substantially as claimed. Meeks '008 discloses a method of forming a consolidated powder article comprising:
  - providing a nanophase aluminum powder (col. 5, lines 1-9);
  - forming a compact of said nanophase aluminum powder at a temperature and pressure (col. 2, lines 29-31);
  - positioning said compact in a flowable pressure transmitting medium (col. 3, line 65 to col. 4, line 18);
  - heating and pressurizing said medium to compact and sinter said preform forming a consolidated powder article (col. 4, lines 3-18).Meeks '008 discloses that when aluminum powders are used, temperature of less than 600oC can be used in the heating step (col. 4, lines 12-18), one of ordinary skill

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determining specific temperatures based on the selection of the specific initial powder composition and the pressure at which the consolidation takes place.

Meeks' 008 is silent as to encompassing the preform in a foil, but it is common knowledge in the prior art to cover performs with foil in order to reduce contamination of the formed article by the medium.

However, Meeks '008 does not disclose wherein the compact is double compacted in the pressure transmitting medium.

Pyzik et al. teaches to form the compact in the pressure transmitting medium as an alternative step to forming the compact outside of the pressure transmitting medium (col. 5, lines 21-47) in the same field of endeavor for the purpose of forming a void free consolidated article.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Meeks '008 as taught by Pyzik et al. by forming the preform in the pressure transmitting medium so as to eliminate a transport step in the production of the consolidated article. This improvement further supports the step of having the powder material which forms the preform encapsulated in a foil so as to support the structure of the loose powder.

Additionally, Pyzik teaches to use a two step isostatic pressing of a preform (col. 8, lines 8-61) to form a void free consolidated article. The Examiner notes that the pending claims allow for a first pressure which permits the surrounding of the preform with the pressure medium at the first temperature.

It would have been obvious to use the two step heating in the preform option of Pyzik in the invention of Meeks '008 in order to form a void free consolidated article.

The determination of the temperatures would be determined by one of ordinary skill based on the compositional limitations of the article, said temperatures closely approximated already by the disclosure of Meeks '008, establishing a prima facie case of obviousness.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Jenkins whose telephone number is 571-272-1242. The examiner can normally be reached on M-TH6:30AM-5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1242. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel J. Jenkins  
Primary Examiner  
Art Unit 1742

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